

## Neosothes, a New Genus with Three New Species, from the Americas (Coleoptera: Anobiidae)

RICHARD E. WHITE, Entomology Research Division, Agr. Res. Serv., U. S. Department of Agriculture, Washington, D. C.

The new species described herein, two from Baja California and one from Cuba, are sufficiently distinct from known genera to require a new generic name. This new genus belongs in the subfamily Dorcatominae.

### NEOSOTHES gen. nov.

Type-species: *Neosothes bicarinatus* n. sp.

*General*: Body elongate-oblong; pubescence very fine, appressed, silky, uniform in direction, moderate in density, not obscuring surface sculpture; punctures very fine, dense, those of elytra, side of pronotum, and metasternum indistinctly of 2 sizes.

*Head*: Front nearly evenly rounded, slightly declivous before clypeus, latter appearing depressed, clypeo-labral suture distinct; eyes entire, moderate in size; antennae 11 segmented, serrate from 4th segment, 1st segment large, oblong, curving, 2nd and 3rd segments small, triangular, 2nd widest apically, 3rd widest near middle (each longer than wide), 4th to 10th segments inclusive produced laterally, about as wide as long, 11th segment oblong, about 2 times as long as wide; last segment of maxillary palpus elongate triangular, broadest before apex, tip pointed; last segment of labial palpus elongate triangular, broadest apically; underside of head not excavate for antennae, shallowly depressed.

*Dorsal Surface*: Pronotum at posterior half nearly evenly rounded throughout, more gradually rounded to anterior margin; posterior margin somewhat raised before elytral humeri; pronotum at extreme side bordered by a very fine carina, lateral margins sharp and distinctly explanate, anterior angle produced, acute, posterior angle broadly obtuse; scutellum rather large.

broadly rounded apically, about as wide as long; elytra with no evidence of striae, humeri distinct.

*Ventral Surface:* Prosternum short and broad, sharply, longitudinally carinate at center, carina produced posteriorly and rounded, margins before coxae sharply produced ventrally, these at center attaining ventral limit of carina; front coxae transverse, contiguous, completely concealed in repose; mesosternum distinctly hollowed at center, apparently receiving antennae in repose, posterior half nearly vertical; middle coxae flat, distinctly separated, concealed in repose, only trochanter visible in this attitude; metasternum at center broadly, not deeply, longitudinally grooved, groove shallower apically, at apex of groove metasternum produced between hind coxae into a pointed, forked process, this nearly or quite attaining posterior limit of hind coxae, surface of metasternum rather bulging each side of median groove, anterior fourth of metasternum inflexed, transversely grooved, receiving middle tibiae and tarsi in repose, groove bordered anteriorly and posteriorly by a carina, anterior carina curving posteriorly behind middle coxae thus narrowing groove, posterior carina more or less interrupted at center by metasternal groove, inflexed portion at center with a short, sharp, distinct, longitudinal carina, this terminating at posterior transverse carina of inflexed portion; metepisternum narrow, elongate, visible throughout, somewhat broadened at each end; metepimeron not visible; hind coxae separated, widest at sides; 1st, 2nd, and 5th abdominal segments at center subequal in length, 3rd segment short, about 2/3rds length of 2nd, 4th segment shortest, slightly shorter than 3rd, 1st segment not grooved for legs, 1st suture feeble to nearly obsolete at center, more distinct at sides, very broadly, posteriorly arcuate at center, other sutures distinct throughout, faintly arcuate posteriorly.

*Neosotes* is most similar to the largely Palearctic genus *Mesotes* Mulsant and Rey (1864, p. 311). I have seen an individual of *Mesotes ferrugineus* (Mulsant and Rey), the type-species of *Mesotes* by monotype. The differences from *Neosotes* shown by the above specimen are as follows, the

parenthetical notations referring to the contrasting condition in *Neosothes*: The anterior median longitudinal carina of the metasternum crosses the posterior transverse ridge delimiting the inflexed portion of the metasternum and extends posteriorly into the median longitudinal metasternal groove (this carina terminates at the posterior transverse ridge); the 1st abdominal segment is very short and nearly concealed by the legs in repose (not short and only partly concealed by the legs in repose); each elytron bears a lateral stria (no lateral stria); lateral margins of pronotum sharp but not explanate (lateral margins of pronotum sharp and distinctly explanate); prosternal intercoxal piece consisting of produced posterior margin (prosternal intercoxal piece an extension of median carina); metepimeron visible (metepimeron not visible); 1st abdominal suture rather weak, following sutures successively more distinct, all more distinct laterally (1st abdominal suture weak at center only, following sutures distinct throughout). The description and illustrations of *M. tenuibrachium* Scott agree with the first three of the above characters and do not cover the other characters. The descriptions of *M. sydowi* Reitter and *M. granulatus* Pic (though offering little else of value) mention a stria on the elytra.

In addition to the 3 species described below I have seen 2 additional species; one (from Puerto Rico) clearly belongs to this genus, but the only specimen is in too poor a condition to describe, and the other (a single specimen from Mexico) exhibits certain differences that do not warrant its inclusion in *Neosothes* at this time.

*Neosothes bicarinatus* n. sp. (Figs. 1, 3)

*General*: Body 1.9 to 2.1 times as long as wide; pubescence very fine, with a silvery luster; reddish brown to dark brown, color not uniform throughout; elytra (except apex) and abdomen usually darkest, appendages lightest, yellowish to reddish brown, scutellum at center nearly orange; punctures of dorsal surface very fine, dense, those of elytra and at side of pronotum indistinctly of 2 sizes, both elytra and pronotum quite shiny.

*Head:* Eyes separated by 1.4 to 2.0 times their vertical diameter; antennae as given for genus; last segment of maxillary palpi a little over 2 times as long as wide, lateral margins rather sinuate, last segment of labial palpi nearly 2 times as long as wide.

*Dorsal Surface:* Pronotum at extreme side flat to somewhat concave; small punctures at side very fine and dense, indistinct larger punctures often with anterior margins raised and producing a finely granulate appearance; small punctures of elytra very fine, dense, larger punctures rather indistinct, sparser apically, imparting a faintly granulate appearance, these stronger than on pronotum.

*Ventral Surface:* Metasternum finely, densely punctate, appearing vaguely granulate, punctures indistinctly of 2 sizes. longitudinal groove at center with sides nearly flat, bordered each side at anterior 2/3rds by a carina continuous with that which delimits anterior, inflexed portion of metasternum, carinae of median metasternal groove gradually weaker posteriorly, metasternal groove separated from anterior inflexed portion by a fine, distinct carina, this not continuous with transverse carina of each side of metasternum, metasternum at center terminating apically between hind coxae into a forked process, tips of process not attaining posterior limit of coxae; 1st abdominal suture weak to nearly obliterated at center, more distinct at sides, other sutures distinct throughout.

Length: 2.0-2.8 mm.

This species is described from 5 individuals taken at a light trap 25 miles west of La Paz, BAJA CALIFORNIA, by K. W. Radford and F. G. Werner. The holotype and 3 paratypes were collected on August 30, 1959; these are in the California Academy of Sciences collection. One paratype was collected on September 4, 1959, and is in the U. S. National Museum collection.

No reliable external characters were discovered for distinguishing the sexes. The variation in eye size may be a secondary sex character, for, in many anobiids, the males have larger

eyes than do the females. The holotype is one of the specimens with large eyes.

The specific name refers to the carinae bordering the longitudinal metasternal groove.

***Neosothes testaceus* n. sp. (Fig. 2)**

*General:* Body 1.6 to 2.0 times as long as wide; pubescence very fine, with a faintly silver luster; dull yellowish brown to dull reddish brown, appendages lighter, most body margins darker, especially sides of pronotum, punctures of dorsal surface very fine, dense, those of elytra and sides of pronotum very indistinctly of 2 sizes; both elytra and pronotum quite shiny.

*Head:* Eyes separated by 2.0 to 2.4 times their vertical diameter; antennae as given for genus; last segment of maxillary palpus elongate, pointed, widest near middle, nearly 3 times as long as wide; last segment of labial palpus elongate triangular, widest at apex, about 2 times as long as wide.

*Dorsal Surface:* Pronotum at extreme side flat or somewhat concave; large punctures at side of pronotum vague, anterior margins somewhat raised thus imparting a finely granulate appearance, larger elytral punctures as vague as large punctures of pronotum, anterior margins just perceptibly raised.

*Ventral Surface:* Metasternum finely, densely punctate, appearing finely granulate, punctures indistinctly of 2 sizes; longitudinal groove at center with side margins evenly rounded and not carinate, transverse carina separating median groove and inflexed portion of metasternum continuous to sides of metasternum, metasternum apically at center terminating between hind coxae in a forked process, tips of process nearly attaining posterior limit of hind coxae; 1st abdominal suture nearly obliterated at center, more distinct at sides, other sutures distinct throughout.

Length: 1.8 to 2.4 mm.

The holotype (in California Academy of Sciences collection) and 2 paratypes (1 in CAS, 1 in USNM) bear the following data: 22mi. N.W. of Penjamo, BAJA CALIFORNIA, August 29, 1959, light trap, K. W. Radford and F. G. Werner. The sex

of the types is not known. The specimen with the largest eyes has been selected as the holotype.

The specific name is in reference to the yellowish brown color typical of this species.

***Neosothes granulatus* n. sp.**

*General*: Body 2.0 times as long as wide; light reddish brown, elytral apex lighter, abdomen a little darker than remainder; punctures of pronotum and elytra fine and very dense, very indistinctly of 2 sizes; elytra moderately shiny, pronotum noticeably less shiny; pubescence very fine, with a faintly yellowish luster.

*Head*: Eyes separated by 1.7 times their vertical diameter; antennae as given for genus; last segment of maxillary palpus pointed, widest near middle, about 2 times as long as wide; last segment of labial palpus triangular, widest at apex, about 1.5 times as long as wide.

*Dorsal Surface*: Pronotum at extreme side flat; punctures at side of pronotum fine and very dense, rather strongly impressed, imparting a finely granulate appearance; punctures of elytra very strongly impressed and imparting a finely granulate appearance.

*Ventral Surface*: Metasternum finely, densely punctate, appearing finely granulate, punctures indistinctly of 2 sizes; longitudinal groove at center of metasternum bordered each side by a distinct carina, this continuous with transverse carina delimiting inflexed portion of metasternum, carinae of median groove a little weaker apically, distinct nearly to forked process of metasternum, tips of process nearly attaining posterior limit of hind coxae, transverse carina that limits median groove anteriorly not continuous with transverse carinae delimiting inflexed portion; 1st abdominal suture nearly obliterated at center, more distinct laterally, other sutures distinct throughout.

Length: 2.0 mm.

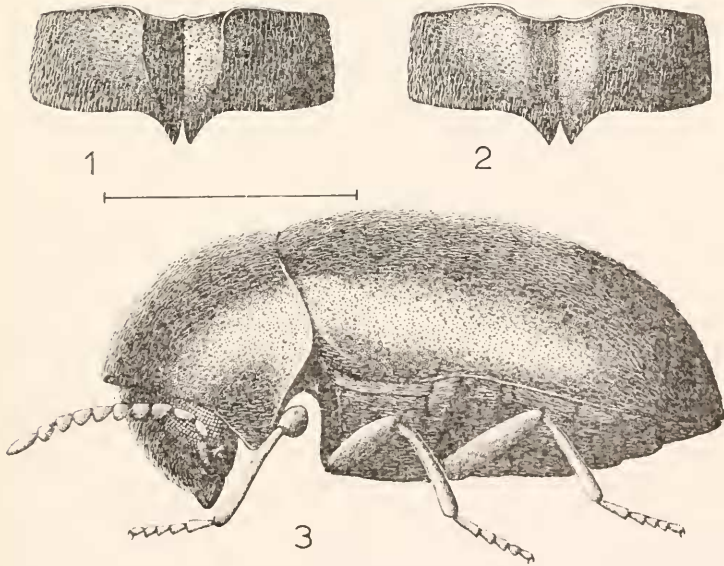
This species is described from a single individual of unknown sex (type number 68928 in USNM) with the following data: Caney, Cuba, VI-18-50, C.S.-688, 50-9728, *Mangifera indica*.



The specific name refers to the finely granulate appearance of the pronotum and elytra, the granulations being more distinct than in the other 2 species.

KEY TO THE AMERICAN SPECIES OF NEOSOTHEs

1. Median longitudinal groove of metasternum with lateral margins evenly rounded, not carinate (Fig. 2) . . . . .  
 . . . . . *testaceus*, n. sp.
  - Median longitudinal groove of metasternum with lateral margins carinate (Fig. 1) . . . . . 2
  2. Pronotum noticeably less shiny than elytra; longitudinal metasternal carinae distinct nearly to terminal metasternal process; Cuba . . . . . *granulatus*, n. sp.
  - Pronotum about as shiny as elytra; longitudinal metasternal carinae feeble to obsolete before terminal metasternal process; Baja California . . . *bicarinatus*, n. sp.
- Thanks are due to H. B. Leech for the loan of specimens.



*Neosotthes*. FIG. 1, Metasternum of *N. bicarinatus*, n. sp., anterior inflexed portion not shown. FIG. 2, Metasternum of *N. testaceus*, n. sp., anterior inflexed portion not shown. FIG. 3, Lateral view of *N. bicarinatus* n. sp. Line equals 1 mm.

## REFERENCE

- MULSANT, E. and C. REY. 1864. *Histoire Naturelle des Coléoptères de France, Terediles*. Paris. p. 1-394, illus.

---

### Insects from McConnell River, N.W.T.

WILLIAM W. JUDD, Department of Zoology, University of Western Ontario, London, Ontario

In 1964, Mrs. C. D. MacInnes, Department of Botany, University of Western Ontario, collected insects at the mouth of the McConnell River, 60° 50'N, 94° 25'W, emptying into Hudson Bay. They have been identified by the following taxonomists (ERI refers to the Entomological Research Institute, Department of Agriculture, Ottawa): C. P. Alexander, Amherst, Mass. (Tipulidae), G. E. Ball, University of Alberta, Edmonton (Carabidae), W. J. Brown, ERI (Silphidae, Dytiscidae, Curculionidae), J. G. Chillcott, ERI (Muscidae, Ephydriidae, Empidae), R. C. Graves, Flint Community Junior College, Flint, Michigan (Cicindelidae), D. F. Hardwick, ERI (Noctuidae), G. Lewis, ERI (Satyridae, Pieridae, Olethreutidae), W. C. McGuffin, ERI (Geometridae), H. E. Milliron, ERI (Hymenoptera), E. G. Munroe, ERI (Pyralidae), L. L. Pechuman, Cornell University, Ithaca (Tabanidae), W. E. Ricker, Fisheries Research Board, Nanaimo, B. C. (Plecoptera), J. R. Vockeroth, ERI (Scatophagidae, Culicidae, Dolichopodidae), G. B. Wiggins, Royal Ontario Museum, Toronto (Tricoptera). The writer identified other butterflies with Klots (1951) and Calliphoridae with Hall (1947). All specimens are deposited in the Department of Zoology, University of Western Ontario, except some noted as "kept" in the institutions in which they were identified.